

Chapter 1

Perceptron

In order to simplify the Neural Networks' introduction, we are going to describe first what Perceptrons are.

The perceptron algorithm for halfspaces.¹

First, basic definitions:

The class of affine function L_d is the defined as follows:

$$L_d = \{h_{w,d} : w \in \mathbb{R}^d, b \in \mathbb{R}\}$$

¹A half-space is either of the two parts into which a hyperplane divides a affine space.